

94 RF 01728

# **EG&G ROCKY FLATS**



000022643

**EG&G ROCKY FLATS, INC.**  
ROCKY FLATS PLANT P O BOX 464 GOLDEN COLORADO 80402-0464 (303) 966-7000

February 23 1994

94 RF 01728

**M H McBride**  
Acting Assistant Manager for  
Environmental Restoration  
DOE, RFO

Attn R J Schassburger

**ACCIDENTAL RELEASE AT THE OPERABLE UNIT 1 (OU1) INTERIM MEASURE/INTERIM  
REMEDIAL ACTION (IM/IRA) TREATMENT FACILITY (BUILDING 891) SGS 105 94**

- Refs (a) Frederick R Dowsett ltr (01569) to Richard J Schassburger **WARNING LETTER** August 26 1993 Accidental Release at OU 1 IM/IRA Treatment Facility (Bldg 891) January 28 1994
- (b) N M Hutchins ltr 93 RF 10602 to J K Hartman Release of Treated Effluent Water from Effluent Tank TK 207 August 27 1993
- (c) M C Broussard ltr 93 RF 12460 to R J Schassburger Follow up on the Unplanned Release of 50 000 60 000 Gallons of Treated Effluent Water from Tank TK 207 October 7 1993

On August 26 1993 approximately 50 000 60 000 gallons of treated effluent water was released from effluent tank TK 207 This was an unplanned release due to the fact that the samples previously taken had not yet been analyzed and the data verified at the time of discharge The root cause of the release was identified as the lack of a valve lineup verification sheet and associated documentation of this secondary check The following corrective actions have been initiated to avoid future incidents at the Building 891 Treatment Facility

- 1 Operations were immediately shutdown upon discovery of the release The Treatment Facility remained shutdown for approximately one week in order to prepare Standard Operating Procedures (SOPs) for critical plant operations Previous operations were conducted under an Operations and Maintenance Manual
- 2 Operators were trained to the critical plant operations SOPs A shift order was issued to incorporate these critical SOPs for use at the Treatment Facility
- 3 Additional SOPs for remaining operations were completed to ensure complete compliance with all aspects of the OU1 Interim Measure/Interim Remedial

DIST	LTR	DOC
BENEDETTI R L		
BENJAMIN A		
BERMAN H S		
BRANCH D B		
CARNIVAL G J		
COPP R D		
DAVIS J G		
FERRERA D W		
HANNI B J		
HARMAN L K		
HEALY T J		
HEDAHL T		
HILBIG J G		
KIRBY W A		
KUESTER A W		
LEE E M		
MANN H P	<input checked="" type="checkbox"/>	
MARX G E		
MCDONALD M M		
McKENNA F G		
MONTROSE J K		
MORGAN R V		
POTTER G L		
PIZZUTO V M		
RILEY J H		
SANDLIN N B		
SHEPLER R L		
STEWART D L		
SULLIVAN M T		
SWANSON E R		
WILKINSON R B	<input checked="" type="checkbox"/>	
WILLIAMS S (ORC)		
WILSON J M		
ZANE J O		
<i>Taborson L D</i>	<input checked="" type="checkbox"/>	
<i>Broussard M C</i>	<input checked="" type="checkbox"/>	
<i>Steger S G</i>	<input checked="" type="checkbox"/>	
COBBES CONTROL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ADMIN RECORDS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TRAFFIC		

## CLASSIFICATION

UCNI	
UNCLASSIFIED	
CONFIDENTIAL	
SECRET	

AUTHORIZED CLASSIFIER  
SIGNATURE  
DOCUMENT CLASSIFICATION  
REVIEW WAIVER PER  
CLASSIFICATION OFFICE

IN REPLY TO RFP CC NO

## ACTION ITEM STATUS

☐ OPEN ☐ CLOSED  
☐ PARTIAL

## LTR APPROVALS

ORIG & TYPIST INITIALS

*MCB. 1mu*

ADMIN RECORD

M H McBride  
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Action Decision Document Facility operations continue to be conducted under the draft SOPs while the final approval process is underway

- 4 The SOP for release of treated effluent water includes a Valve Position Table and a checklist (Treated Effluent Discharge Checklist Operable Unit 1 Building 891) which requires signature verification prior to unlocking and opening the discharge valves Two effluent tanks (approximately 220 000 gallons) have been discharged in full compliance (See Attach 1) with the IM/IRA Decision Document while utilizing the draft SOP for discharge of treated effluent
- 5 An accelerated review/approval schedule has been initiated for the SOP for discharge

A copy of the draft SOP for release of treated effluent is attached Also attached is the schedule for the review comment and approval cycle for the remainder of the SOPs for the OU1 IM/IRA

If you have any questions or concerns please contact Mark Burmeister at extension 5891



S G Stiger  
Associate General Manager  
Environmental Restoration Management  
EG&G Rocky Flats Inc

MCB lmw

Orig and 1 cc M H McBride

Attachments  
As Stated (3)

cc

A H	Paule	DOE RFO
T	Reeves	
R J	Schassburger	
M N	Silverman	
V F	Witherill	

## Treated Effluent Discharge Data

Attachment 1

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TANK #	TK 206	TK 207	TK 206	TK 206	
DATE DISCHARGED	11/19/93	12/21/93	2/15/94	2/15/94	
VOC DATE SAMPLED	10/21/93	12/1/93	12/17/93	1/12/94	ARAR
VOC SAMPLE #	FT10104RG	FT10133RG	FT10155RG	FT10159RG	
Methylene Chloride	3BJ	5U	5U	5U	5
Acetone	10U	10U	10U	10U	50
Carbon disulfide	5U	5U	5U	5U	5
1 1 Dichloroethene	5U	5U	5U	5U	7
1 1 Dichloroethane	5U	5U	5U	5U	5
1 2 Dichloroethane	5U	5U	5U	5U	5
1 1 1 Trichloroethane	5U	5U	5U	5U	200
Carbon Tetrachloride	5U	5U	5U	5U	5
1 1 2 Trichloroethane	5U	5U	5U	5U	5
Trichloroethene	5U	5U	5U	5U	5
Tetrachloroethene	5U	5U	5U	5U	5
Toluene	5U	5U	5U	5U	2000
Xylene			9		N/A

MET DATE SAMPLED	10/21/93	11/22/93	12/17/93	1/12/94	ARAR
MET SAMPLE #	FT10104RG	FT10129RG	FT10155RG	FT10159RG	
Aluminum	78 4U	22 5U	<100	33 4B	5000
Antimony	35 2U	22 7U	<50	18 0U	60
Arsenic	1 2U	4 8B	<5	1 0U	50
Barium	68 9B	154B	110	52 2B	1000
Beryllium	2 4U	1 7U	<5	1 0U	100
Cadmium	2 7U	2 9U	<5	4 0U	10
Chromium	3 0U	4 8U	<5	3 0U	50
Copper	2 4U	7 6B	19	8 0B	200
Iron	174	115	250	259	300
Lead	70U	1 1U	<5	2 0U	50
Lithium	3 1B	13 6B	<10	2 4B	2500
Manganese	4 2B	5 4B	<6	4 2B	50
Mercury	10U	10U	< 1	.2U	2
Molybdenum	4 4U	13 7B	<10	6 0U	100
Nickel	17 8U	13 5B	<10	8 0U	200
Selenium	1 0U	5 6	<5	1 0U	10
Silver	3 4U	4 1U	<5	2 0U	50
Thallium	90U	1 3B	<5	2 0U	10
Vanadium	3 3U	3 3U	<5	3 0U	100
Zinc	7 6B	107	35	16 7B	2000

WQ DATE SAMPLED	10/21/93	12/15/93	12/17/93	1/12/94	ARAR
WQ SAMPLE #	FT10104RG	FT10154RG	FT10155RG	FT10159RG	
Total Dissolved Solids	89 mg/l	83 mg/l	88 mg/l	73 mg/l	400 mg/l
Chloride	30 7 mg/l	31 6 mg/l	39 mg/l	36 mg/l	250 mg/l

# Treated Effluent Discharge Data

Page 2 of 2

TANK #	TK 206	TK 207	TK 206	TK 206	
DATE DISCHARGED	11/19/93	12/21/93	2/15/94	2/15/94	
Nitrate/Nitrite	72 mg/l	87 mg/l	85 mg/l	7 mg/l	10 mg/l
Sulfate	12 mg/l	5U mg/l	< 10 mg/l	2U mg/l	250 mg/l
pH	7.78	8.72	8.6	6.19	6 to 9
RAD DATE SAMPLED	10/21/93	11/22/93	12/17/93	1/12/94	ARAR
RAD SAMPLE #	FT10104RG	FT10129RG	FT10155RG	FT10159RG	
Gross Alpha	587 +/- 1066	3331 +/- 2064	(134) +/- 635	220 +/- 637	15
Gross Beta	1142 +/- 1114	3588 +/- 1302	1811 +/- 1083	342 +/- 1130	50
Uranium (233 234 235 238)	087 +/- 137	8832 +/- 2039	078 +/- 266	087 +/- 168	40
Strontium	180 +/- 191	062 +/- 123	023 +/- 268	058 +/- 183	8
Plutonium	0 +/- 005	004 +/- 004	002 +/- 002	003 +/- 003	15
Americium	002 +/- 006	002 +/- 004	001 +/- 003	001 +/- 009	4
Tritium	7676 +/- 14943	219300 +/- 130458	66360 +/- 120841	69980 +/- 122716	20000

B (VOLATILES)-PARAMETER ALSO FOUND IN LABORATORY BLANK

B (METALS)-LESS THAN METHOD DETECTION LIMIT BUT GREATER THAN OR EQUAL TO INSTRUMENT DETECTION LIMIT

J-VALUE ESTIMATED BELOW DETECTION LIMIT

U-PARAMETER NOT DETECTED

Note VOC and Metals Results are in ug/l Rads are pci/l

Note Preliminary data not validated

# ROCKY FLATS PLANT

Attachment 2  
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4-I50-ENV-OPS-FO 32

REVISION 0, DRAFT J

## TREATED EFFLUENT DISCHARGE OPERABLE UNIT 1, BUILDING 891

APPROVED BY \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Associate General Manager Print Name Date  
EG&G Environmental Restoration Management

\_\_\_\_\_  
Quality Assurance Program Manager Print Name Date  
EG&G Environmental Restoration Management

CONCURRENCE BY \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Director Print Name Date  
Environmental Restoration Division  
DOE Rocky Flats Office

Environmental Protection Agency Approval Required ☐ Yes ☐ No

Responsible Organization Environmental Restoration Management Effective Date \_\_\_\_\_

CONCURRENCE BY THE FOLLOWING DISCIPLINES WILL BE DOCUMENTED IN  
THE PROCEDURE HISTORY FILE

Environmental Engineering and Technology  
Environmental Operations Management  
Geosciences  
Remediation Project Management  
Sample Management  
Industrial Hygiene  
Occupational Safety  
Radiological Engineering  
Surface Water Division

USE CATEGORY 3

ORC review not required

Periodic review frequency 1 year from the effective date

LIST OF EFFECTIVE PAGES

<u>Pages</u>	<u>Effective Date</u>	<u>Change Number</u>
1 19	mm/dd/94	

TOTAL NUMBER OF PAGES 19

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**1 PURPOSE**

This procedure describes the administrative and operations steps used at Rocky Flats Plant (RFP) for discharging treated effluent from the Building 891 Groundwater Treatment Facility for 881 Hillside Operable Unit (OU) 1 to the South Interceptor Ditch

**2 SCOPE**

This procedure applies to all discharges of treated effluent from the Building 891 Groundwater Treatment Facility to the South Interceptor Ditch used by Environmental Operations Management employees and subcontractors

This procedure addresses the administrative controls of the treated effluent discharge from the Building 891 Groundwater Treatment Facility

**3 OVERVIEW**

This procedure describes the steps for discharging treated effluent from the Building 891 Groundwater Treatment Facility. The facility consists of a groundwater recovery and storage system, an ultraviolet/hydrogen peroxide oxidation system, an ion exchange system with units for acid and caustic regeneration of resin, a spent regenerant neutralization system, and a treated effluent storage and discharge system.

This procedure was established to ensure that treated effluent from the Building 891 Groundwater Treatment Facility meets the applicable or relevant and appropriate requirements (ARARs) in the Interim Measures/Interim Remedial Action Plan and Decision Document 881 Hillside Area Operable Unit 1 for discharge to the South Interceptor Ditch. The OU 1 Building 891 ARARs are included as Appendix 1.

**4 RESPONSIBILITIES**

**4.1 Operations Manager**

Verifies that the analytical results are in compliance with the OU 1 Building 891 ARARs in Appendix 1.

**4.2     Operator**

Verifies the valve positions

Records the discharge information on the daily logs

Verifies and logs all tank levels

**4.3     Project Manager**

Verifies that the analytical results are in compliance with the OU 1 Building 891 ARARs in Appendix 1

Notifies applicable agencies of the analytical results and of the intent to discharge

Instructs the Operator when to discharge an effluent tank

Locks and unlocks the valves verifies the valve positions and records actions on the Treated Effluent Discharge Checklist Operable Unit 1 Building 891 Appendix 2

**4.4     Shift Foreman**

Verifies the valve positions

**5       LIMITATIONS AND PRECAUTIONS**

- The steps in this procedure shall be followed to ensure that the treated effluent from the Building 891 Groundwater Treatment Facility meets the requirements established for RFP by the U S Department of Energy (DOE) the U S Environmental Protection Agency (EPA) and the Colorado Department of Health (CDH)
- Visually monitor the effluent outfall to verify that the discharge flow does not result in soil erosion or overflow the bounds of the South Interceptor Ditch This is to minimize the potential for damage to vegetation or soil erosion

## **6 PREREQUISITE ACTIONS**

### **Project Manager**

- [1] Ensure that all personnel involved in the field implementation of this procedure are trained in the site specific health and safety plan**
- [2] Arrange for the collection and analysis of samples of the discharge from the following treated effluent storage tanks**
  - T 205**
  - T 206**
  - T 207**

**Samples are collected and analyzed in accordance with the Sampling and Analysis Plan for Operation and Maintenance of the Interim Measures/Interim Remedial Action for the 881 Hillside Operable Unit No 1 and 4-B35 ER-OPS FO 13**

**Containerization Preserving Handling and Shipping of Samples**

- [3] Maintain control of the keys to the locks installed on the following effluent valves**
  - HVB 205**
  - HVB 206**
  - HVB 207**

**7 INSTRUCTIONS—ADMINISTRATIVE**

**NOTE**     *The following analytical results will come from an RFP approved laboratory*

**Project Manager**

- [1]    Verify that the analytical results are in compliance with the OU 1 Building 891 ARARs in Appendix 1
  
- [2]    Record the tank number and the sample number(s) for each tank on the Treated Effluent Discharge Checklist Operable Unit 1 Building 891

**Project Manager and Operations Manager**

- [3]    Sign and date the Treated Effluent Discharge Checklist Operable Unit 1 Building 891

**Project Manager**

- [4]    Notify the following of the analytical results and the intent to discharge treated effluent
  - DOE
  - CDH
  - EPA
  - OU 1 Manager
  - Surface Water Division Manager
  - RFP Shift Supervisor
  
- [5]    WHEN the notifications have been sent  
      THEN sign and date the Treated Effluent Discharge Checklist Operable Unit 1 Building 891
  
- [6]    Authorize the discharge of the treated effluent tank

**8 INSTRUCTIONS—TREATED EFFLUENT OPERATION**

**8.1 Valve Position Verification**

**Project Manager, Shift Foreman, and Operator**

- [1] Verify that all system valves on the Effluent Storage System Valve Position Appendix 3 are CLOSED before discharge of treated effluent from Building 891

**8.2 Discharge from T 205**

**Project Manager**

- [1] Unlock valve HVB 205

**Operator**

- [2] Open valve HVB 205 to approximately 25% of the fully OPEN position

**Project Manager Shift Foreman, and Operator**

- [3] Record the time and date and sign the Treated Effluent Discharge Checklist Operable Unit 1 Building 891

**Operator**

- [4] Record the following for each discharge on the Daily Log and on the Building 891 Tank Level/Volume Log Appendix 4
  - Time
  - Date
  - Tank number
- [5] Verify and log all tank levels on the Daily Log and on the Building 891 Tank Level/Volume Log at least once every 2 hr during the discharge of treated effluent
- [6] WHEN the level readout for T 205 on the Allen Bradley screen indicates that the tank is empty  
OR discharging is stopped for any reason  
THEN close valve HVB 205
- [7] IF discharging is stopped  
THEN log the basis for determination

**8 2 Discharge from T 205 (continued)**

**Project Manager**

[8] Lock valve HVB 205

[9] Notify the RFP Shift Supervisor and the Surface Water Division Manager of the termination of discharge and of the volume of water discharged

**Project Manager, Shift Foreman, and Operator**

[10] Record the time and date and sign the Treated Effluent Discharge Checklist  
Operable Unit 1 Building 891

**8 3 Discharge from T 206**

**Project Manager**

[1] Unlock valve HVB 206

**Operator**

[2] Open valve HVB 206 to approximately 25% of the fully OPEN position

**Project Manager Shift Foreman and Operator**

[3] Record the time and date and sign the Treated Effluent Discharge Checklist  
Operable Unit 1 Building 891

**Operator**

[4] Record the following for each discharge on the Daily Log and on the Building 891  
Tank Level/Volume Log

- Time
- Date
- Tank number

[5] Verify and log all tank levels on the Daily Log and on the Building 891 Tank  
Level/Volume Log at least once every 2 hr during the discharge of treated effluent

[6] WHEN the level readout for T 206 on the Allen Bradley screen indicates that the tank  
is empty  
OR discharging is stopped for any reason  
THEN close valve HVB 206

**8.3 Discharge from T 206 (continued)**

**Operator (continued)**

- [7] IF discharging is stopped  
THEN log the basis for determination

**Project Manager**

- [8] Lock valve HVB 206
- [9] Notify the RFP Shift Supervisor and the Surface Water Division Manager of the termination of discharge and of the volume of water discharged

**Project Manager Shift Foreman, and Operator**

- [10] Record the time and date and sign the Treated Effluent Discharge Checklist  
Operable Unit 1 Building 891

**8.4 Discharge from T 207**

**Project Manager**

- [1] Unlock valve HVB 207

**Operator**

- [2] Open isolation effluent valve HVD 207 on T 207
- [3] Open valve HVB 207 to approximately 25% of the fully OPEN position

**Project Manager Shift Foreman, and Operator**

- [4] Record the time and date and sign the Treated Effluent Discharge Checklist  
Operable Unit 1 Building 891

**Operator**

- [5] Record the following for each discharge on the Daily Log and on the Building 891 Tank Level/Volume Log
- Time
  - Date
  - Tank number

8 4 Discharge from T 207 (continued)

Operator (continued)

- [6] Verify and log all tank levels on the Daily Log and on the Building 891 Tank Level/Volume Log at least once every 2 hr during the discharge of treated effluent.
- [7] WHEN the level readout for T 207 on Allen Bradley screen indicates that the tank is empty  
OR discharging is stopped for any reason  
THEN close valve HVB 207
- [8] IF discharging is stopped  
THEN log the basis for determination

Project Manager

- [9] Lock valve HVB 207
- [10] Notify the RFP Shift Supervisor and the Surface Water Division of the termination of discharge and of the volume of water discharged

Project Manager Shift Foreman, and Operator

- [11] Record the time and date and sign the Treated Effluent Discharge Checklist  
Operable Unit 1 Building 891

Operator

- [12] Close effluent isolation valve HVD 207 on T 207

9 RECORDS

Management of all records are consistent with 1 77000-RM-001 Records Management  
Guidance for Records Sources

The checklists and logs generated as a result of this procedure are considered quality records These records are managed in accordance with 2 G18 ER ADM 17 01 Quality Assurance Records Management

These records are part of the Administrative Record (AR) These ARs are also managed in accordance with 3 21000 ADM 17 02 Administrative Records Screening and Processing in addition to 2 G18 ER ADM 17 01



**9 RECORDS (continued)**

There are no nonquality records generated by this procedure

**Project Manager**

- [1] Submit the records listed below for management in accordance with 3 21000-ADM 17 02 and 2-G18 ER ADM 17 01
- Treated Effluent Discharge Checklist Operable Unit 1 Building 891
  - Building 891 Tank Level/Volume Log
  - Daily Log

**10 REFERENCES**

Sampling and Analysis Plan for Operation and Maintenance of the Interim Measures/Interim Remedial Action for the 881 Hillside Operable Unit No 1 1993

Interim Measures/Interim Remedial Action Plan and Decision Document 881 Hillside Area Operable Unit 1 1990

1 77000-RM-001 Records Management Guidance for Records Sources

2 G18 ER ADM 17 01 Quality Assurance Records Management (until this procedure is issued use 3 21000-ADM 17 01)

3 21000 ADM 17 02 Administrative Records Screening and Processing

4 B35 ER OPS FO 13 Containerization Preserving Handling and Shipping of Samples (until this procedure is issued use 5 21000-OPS FO 13)

APPENDIX 1

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## OU 1 BUILDING 891 ARARs

<u>ORGANICS</u>	<u>UNITS</u>	<u>TREATMENT REQUIREMENTS</u>
Methylene Chloride	ug/l	5
Acetone	ug/l	50
Carbon Disulfide	ug/l	5
1 1 Dichloroethene	ug/l	7
1 1 Dichloroethane	ug/l	5
1 2 Dichloroethane	ug/l	5
1 1 1 Trichloroethane	ug/l	200
Carbon Tetrachloride	ug/l	5
Trichloroethene	ug/l	5
1 1 2 Trichloroethane	ug/l	5
Tetrachloroethene	ug/l	5
Toluene	ug/l	2000

<u>METALS</u>	<u>UNITS</u>	<u>TREATMENT REQUIREMENTS</u>
Aluminum	mg/l	5
Antimony	mg/l	06
Arsenic	mg/l	05
Barium	mg/l	1 0
Beryllium	mg/l	0 1
Cadmium	mg/l	0 01
Cesium	mg/l	NS
Chromium	mg/l	0 05
Copper	mg/l	0 2
Iron	mg/l	0 3
Lead	mg/l	0 05
Lithium	mg/l	2 5
Manganese	mg/l	0 05
Mercury	mg/l	0 002
Molybdenum	mg/l	0 1
Nickel	mg/l	0 2
Selenium	mg/l	0 01
Silver	mg/l	0 05
Strontium	mg/l	NS
Thallium	mg/l	0 01
Vanadium	mg/l	0 1
Zinc	mg/l	2 0

**APPENDIX 1**

Page 2 of 2

<b><u>MAJOR IONS</u></b>	<b><u>UNITS</u></b>	<b><u>TREATMENT REQUIREMENTS</u></b>
Calcium	mg/l	NS
Magnesium	mg/l	NS
Potassium	mg/l	NS
Sodium	mg/l	NS
Total Dissolved Solids	mg/l	400
Chloride	mg/l	250
Nitrite and Nitrate	mg/l	10
Sulfate	mg/l	250
Bicarbonate as (CaCO <sub>3</sub> )	mg/l	NS

  

<b><u>RADIONUCLIDES</u></b>	<b><u>UNITS</u></b>	<b><u>TREATMENT REQUIREMENTS</u></b>
Gross Alpha	pCi/l	15
Gross Beta	pCi/l	50
Uranium (Total)	pCi/l	40
Strontium (89 90)	pCi/l	8
Plutonium (239 240)	pCi/l	15
Americium (241)	pCi/l	4
Tritium	pCi/l	20 000

NS No standard

**APPENDIX 2**

Page 1 of 2

**TREATED EFFLUENT DISCHARGE CHECKLIST  
OPERABLE UNIT 1, BUILDING 891**

TREATED EFFLUENT DISCHARGE CHECKLIST OPERABLE UNIT 1 BUILDING 891				
Form FO.32A				
Rev				
Sheet of 2				
<p>EG&amp;G review of analytical results for treated effluent verified against ARARs (see Appendix 1 of 4-I50-ENV OPS-FO.32) in the Interim Measures/Interim Remedial Action Plan and Decision Document 881 Hillside Area Operable Unit 1</p>				
Tank Number		Sample Number(s)		
<p>Acceptable for discharge _____ Date _____ Signature _____</p> <p>Approved for discharge _____ Date _____ Signature _____</p> <p>Notations to DOE EPA CDH the Surface Water Division Manager the OU 1 Manager and the RFP Shift Supervisor completed _____ Date _____ Signature _____</p> <p>Signatures must be EG&amp;G Environmental Operations Management personnel only</p>				
Act on	Responsible Individual	Time	Date	Initials
<p>Valve Position Verification</p> <p>All effluent storage system valves (see Appendix 3 of 4 I50-ENV OPS-FO.32) are closed</p>	[Diagonal Line]			
	Operator			
	Shift Foreman			
	Project Manager			
<p>Effluent Tank No. T 205 discharge</p> <p>Discharge made <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>HVB 205 is unlocked and opened</p>	[Diagonal Line]			
	Operator			
	Shift Foreman			
	Project Manager			
<p>HVB 205 is closed and locked</p>	[Diagonal Line]			
	Operator			
	Shift Foreman			
	Project Manager			

APPENDIX 2

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TREATED EFFLUENT DISCHARGE CHECKLIST OPERABLE UNIT 1 BUILDING 891				
EG&G review of analytical results for treated effluent verified against ARARs (see Appendix 1 of 4-150 ENV OPS FO.32) in the Interim Measures/Interim Remedial Action Plan and Decision Document, 881 Hllside Area Operable Unit 1				
Tank Number	Sample Number(s)			
Action	Responsible Individual	Time	Date	Initials
Effluent Tank No T 206 discharge				
Discharge made <input type="checkbox"/> Yes <input type="checkbox"/> No				
HVB 206 is unlocked and opened				
	Operator			
	Shift Foreman			
	Project Manager			
HVB 206 is closed and locked				
	Operator			
	Shift Foreman			
	Project Manager			
Effluent Tank No T 207 discharge				
Discharge made <input type="checkbox"/> Yes <input type="checkbox"/> No				
HVB 207 is unlocked and opened				
	Operator			
	Shift Foreman			
	Project Manager			
HVB 207 is closed and locked				
	Operator			
	Shift Foreman			
	Project Manager			
HVB 207 is closed				
	Operator			
	Shift Foreman			
	Project Manager			
Comments _____				

**APPENDIX 3**  
Page 1 of 1

**EFFLUENT STORAGE SYSTEM VALVE POSITION**

Function	HVB 205	HVB 206	HVB 207	HVC 205	HVC 206	HVC 207	HVD 207
<b>DISCHARGE</b>							
T 205	O	C	C	C	C	C	C
T 206	C	O	C	C	C	C	C
T 207	C	C	O	C	C	C	O

**APPENDIX 4**

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**BUILDING 891 TANK LEVEL/VOLUME LOG**

F m FO.32B Rev 0

**BUILDING 891 TANK LEVEL/VOLUME LOG**

DATE	START LEVEL	ENDING LEVEL	COMMENTS
F 201 INFLUENT STORAGE			
F 202 INFLUENT STORAGE			
I 203 INFLUENT STORAGE			
I 204 INFLUENT			
I 205 EFFLUENT STORAGE (111 ~ 10 000 GAL)			
F 206 EFFLUENT STORAGE (111 ~ 10 000 GAL)			
T 207 EFFLUENT STORAGE (111 ~ 10 000 GAL)			
I 210 NEUTRALIZATION			
IRLACH DRAIN			

SYSTEM	GALLONS PROCESSED	COMMENTS
UV/FROVIDL		
ION EXCHANGE		

**SCHEDULE FOR COMPLETION OF OPERABLE UNIT 1 BUILDING 891 STANDARD  
OPERATING PROCEDURES**

Environmental Quality Support Formatting	February 10	February 25
PPG Edit	February 12	February 28
Incorporate Comments from Edit	February 28	March 4
Parallel Internal Review	March 7	March 25
Incorporate Comments	March 18	April 1
Comment Resolution/Concurrence	April 4	April 12
DOE Review	April 13	April 25
Management Concurrence	April 25	April 29
Verification & Validation	April 25	April 29
Incorporate DOE Comments	April 25	April 29
PPG Edit/Incorporate Comments	May 2	May 6
Send to DOE for Concurrence	May 9	
Process/Finalize	1 Week	